



King County

**Department of Permitting
and Environmental Review**

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Wetland Delineation Report Criteria

For alternate formats, call 206-296-6600.

Introduction

The purpose of a wetland report is to convey an objective, factual picture of the extent and location and important characteristics of wetlands at a given site. The report is based on the collection of field data and review of any pertinent background information. The documentation must include field data sheets and rating forms; an accurate map of the site, including wetland boundaries and the location of all the data collection points; and a narrative that explains the wetland scientist's approach to collecting data as well as his or her conclusions.

Section I. Field Procedures and Standards

Wetland scientists shall use the 1987 *Wetlands Delineation Manual* and the May 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (WMVCR)*, both from the US Army Corps of Engineers, as the technical basis for identifying and delineating wetlands.

Wetland scientists shall evaluate and affirm in writing that the entire project site and surrounding vicinity within a minimum of 200 feet of the project boundaries was examined on the ground (except where access was denied) and whether wetlands and/or streams are present within these areas.

Wetland scientists shall uniquely identify the boundaries of each wetland in the field by affixing colored, lettered and numbered flagging to fixed objects such as wood vegetation or survey stakes (e.g., Wetland A, Flags #A1-AX; Wetland B, Flags #B1-BY; Wetland C, Flags #C1-CZ, etc.) Flagging shall be placed at intervals no greater than 25 feet in wooded areas, up to 40 feet in open areas.

Wetland scientists shall uniquely identify in the field each sample plot site for which data are recorded by affixing colored, lettered and numbered flagging to fixed objects such as woody vegetation or survey stakes. As a rule, large and/or complex sites with broad transition zones are likely to need many sample points to adequately reflect ground conditions, whereas smaller, less complex sites may only need a few sample points.

Soils must be examined to a depth below the A horizon, or to 18 inches, whichever is greater, per the *Wetlands Delineation Manual* and *Regional Supplement WMVCR*. Soil characteristics (e.g., Munsell colors, mottling, oxidized rhizospheres, textures, moisture content, etc.) must be described throughout the entire soil profile examined.

To facilitate field verification by agency staff, wetland flagging shall be in place and be easily readable when agency staff members conduct field verification of the delineation.

Field observations of hydrologic connections among wetlands or between on-site or off-site streams and wetlands shall be noted on the data sheets, shown on the wetland delineation map, and discussed in the report.

Wetlands shall be classified into categories using the revised *Washington State Wetland Rating System for Western Washington*, Ecology Publication #04-06-025, 2004.

The wetland rating documentation must include a Wetland Rating Form (updated 2008 or most recent) for each wetland on the property.

The County's required buffer width in King County Code 21A.24.325 shall be determined for each wetland based on the wetland rating.

At least two color ground photographs of each wetland and stream shall be included as an appendix to the wetland report.

Section II. Wetland Maps

Wetland maps shall show the following information:

1. Reference streets, North arrow and scale.
2. Wetland boundary flags, with flag numbers.
3. Sample points corresponding to field data sheets.
4. Wetland unit used for rating purposes:
5. Wetland rating and standard buffer width.
6. Contours at the smallest easily available interval. For large developments, plats and short plats, or where mitigation is proposed, flagged wetland boundaries and the numbered sample plots shall be mapped at the 2-foot contour interval following a civil survey conducted by a qualified professional surveyor. Smaller projects such as residential building permits may measure as accurately as possible from identifiable points.
7. Areas on and within 25 feet of a proposed wetland and/or stream mitigation site where grading will be conducted shall be shown at the 1-foot contour interval.
8. Stream channels shall be shown at whichever of the above contour intervals is appropriate, depending on whether a stream is on or within 200 feet of a proposed wetland and/or stream mitigation site. Additional information about stream channel morphology may be required as part of a separate stream habitat special study.
9. Observed hydrologic connections among wetlands or between on-site or off-site streams and wetlands.
10. Photo points where photographs of site wetlands and/or streams were taken.

Section III. Wetland Reports

Wetland reports submitted to the county for review shall contain at a minimum the following:

1. Field data sheets, documenting vegetation, soils and hydrology observations at indicated sample points.
2. Date and weather conditions when the delineation occurred.
3. Colors of flagging used to identify wetland boundaries, sample points, and all other civil survey features.
4. Wetland rating form for each wetland in the report.
5. Vicinity map.
6. Site map, showing existing and planned lot lines, existing and proposed roads and trails, existing and planned streets, culverts, stormwater facilities, and structures, and existing streams, wetlands, steep slopes, 100-year floodplain boundaries, and significant trees.
7. Wetland map, as described above.
8. Map of any wetland areas that may be impacted by the project.
9. Methodology section. Describe the wetland scientist's approach to collecting data, and discuss any modification to the standard sampling methodology and rationale. Include a description of how plant dominance was established and why the methodology used was adequate to characterize the vegetation.
10. Results and Discussion section. This must include the rationale for the determination of the wetland boundary and how it was subsequently marked or flagged. The rationale for determining wetland buffer must also be included. This discussion must be supported by the data as documented on the field data sheets and wetland rating form. Other information to support the conclusions of the wetland scientist that may be included are a discussion of site topography, the location of plant communities, site land use history, soil survey mapping and soils descriptions, and unusual site characteristics.
11. Impact Assessment section. The wetland report should provide general information on the development proposal and whether and how wetland area and functions will be adversely affected by the proposed project. More detailed information will be required as part of a mitigation proposal if the county agrees that wetland impacts are unavoidable for an individual proposal.

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12. Summary. This section should briefly summarize and conclude the results of the field investigation.
13. Literature cited.

Reference

US Army Corps of Engineers. *Wetlands Delineation Manual*. January 1987.

US Army Corps of Engineers; *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*. May 2010.

Washington State Department of Ecology; *Washington State Wetland Rating System for Western Washington, Revised*. August 2004.

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